

Jedox 7.0

## First Steps with Jedox Integrator



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# 1 Introduction

Jedox Integrator is Jedox's Extract, Transform and Load software. This Jedox module is ETL software designed specifically to tackle the considerable challenges which are presented when large quantities of data are imported into or exported from Jedox databases. It allows the extraction of data from heterogeneous sources, as well as the transformation and loading of master and transaction data into Jedox models. With the help of the Jedox Integrator, flexible data imports can be carried out easily and fully automatically. All established relational databases can be connected as data sources via a standardized interface. Furthermore, complex transformations and aggregations can be modeled.

Jedox Integrator can be operated both from the command line level and, more conveniently, using the Jedox Web component Integrator.

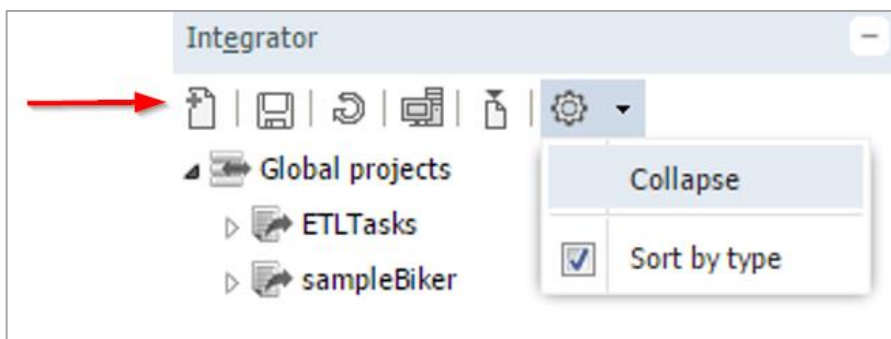
If you have carried out a Jedox Web installation, clear your browser's cache and your cookies to ensure that you are working with the most recent Integrator.

This manual describes first steps with Jedox Integrator.

## 2 Creating a new Jedox Integrator Project

At the start of a new Integration process, a new project must be created. Alternatively, you can use an existing example or you can import a provided sample project.

By opening the component Integrator, you will see the Integrator Task buttons and the existing examples:



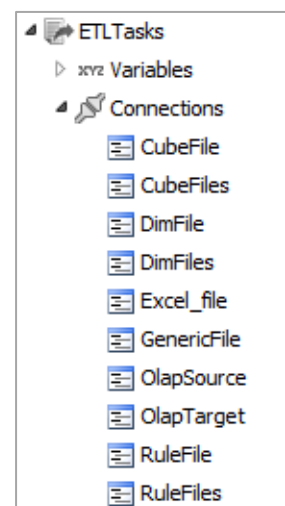
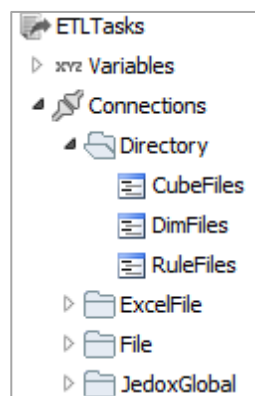
### Buttons:

- New Project
- Save all changes
- Refresh
- Monitor  
Displays an overview of the performed jobs and loads. For the selected job / load are displayed more details.
- Import  
Imports Integrator projects

- Collapse  
Collapses all opened sub structures of the Jedox Integrator projects.

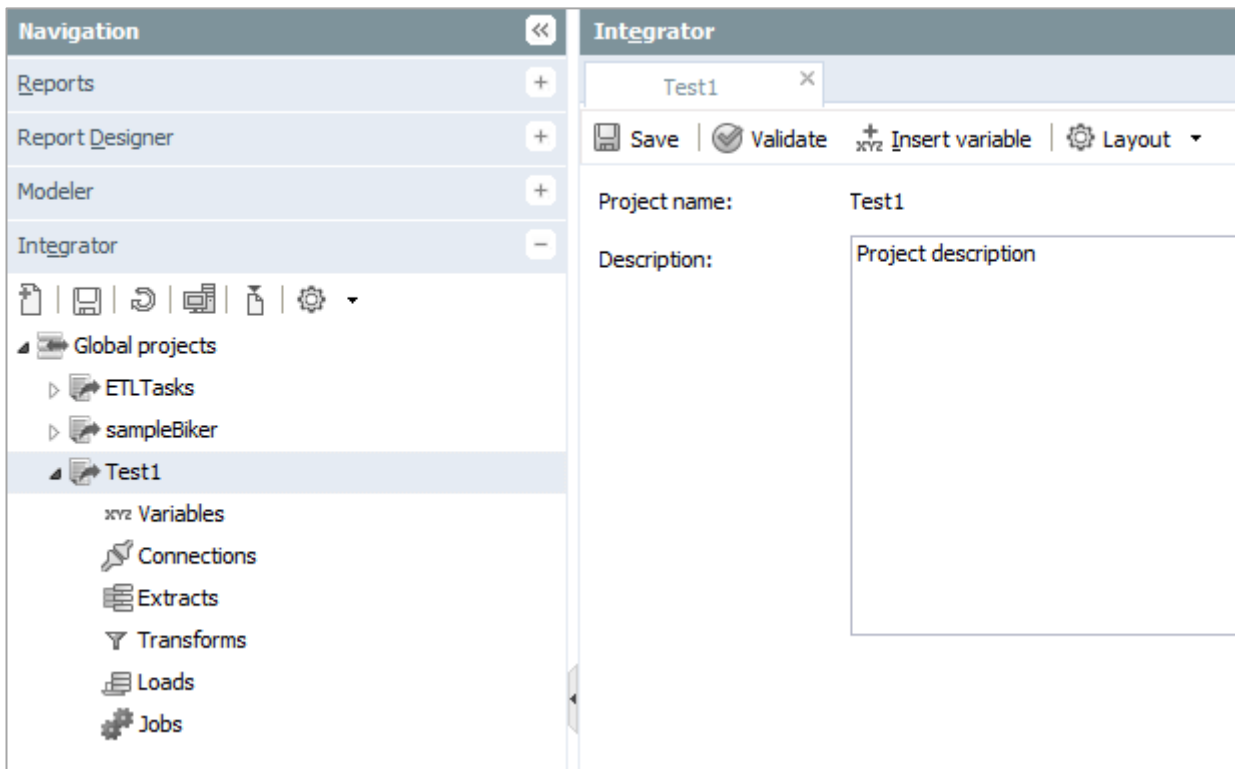
- Sort by type  
If set, then components are grouped by type, here after connection type (left picture).

If not set, then the components are not grouped by type (right picture).



Please create a new project "Test1". You get "Test1" initially with empty module structure.

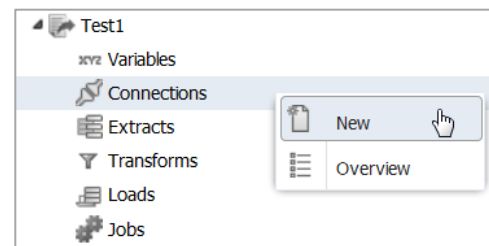
For focusing please click again on "Test1". Now you can enter a description of the project:



Click on "Save" when you have completed your entries.

### 3 Creating a new component

With right-click on a module you can create a new corresponding element or you can display an overview of the elements which exist in the selected component group. On the right, you see the possibilities.



As an example, we create a new connection.

In next step, you can select the connection type and enter the connection name.

Please select type "CSV File".

After "OK" you get the dialog to enter "Description", "Main settings" and "Advanced settings":

Save | Test | <sup>xvz</sup> Insert Variable | Layout ▾

▲ General settings

Type: File Connection

Name: New Connection

Description:

▲ Main settings

Location:  ▾

File name:

Header:

Data delimiter:  ▾

Enclosure character:  ▾

▲ Advanced settings

Encoding:  ▾

Use escape character:

SSL Mode:  ▾

With right click on a component group (Variables, Connections ...) you get an overview about the elements:

Overview

Name ▲	Type	Description
CreateOlap	Groovy	Creates a complete Olap Mo...
CubeAnonymize	Standard	Copy Cube with anonymized...
CubeCopy	Standard	Cube to Cube Copy Variable...
CubeFile_Type_Job	Groovy	
CubePopulate	Standard	Generates cell paths with ra...
CubeRulesCalc	Standard	Copy Cube with precalculat...
CubesCopyAll	Groovy	
CubesFromFileAll	Groovy	
CubesFromFile_Insert_All	Groovy	
CubesToFileAll	Groovy	
CubeWithRulesCopy	Standard	
DatabaseAnonymize	Standard	Copy a complete Olap datab...
DatabaseBackup	Standard	Backup a Jedox database to...
DatabaseCopy	Standard	Copy a complete Jedox dat...
DatabaseRestore	Standard	Restoring a Jedox database...
DatabaseSave	Groovy	Saves all Jedox Cubes and t...

Close

Here you can sort the elements by name, by type and by description. Furthermore, you can resize this window and all displayed columns.

Double-click a component opens this component and closes the overview window.

## 4 Flow Graph

Jedox Integrator projects can become complex if a lot of data sources, extracts and transformations are necessary.

Under "Layout" you can display a flow graph to receive a better overview over the whole Jedox Integrator process flow. It displays for the focused component all preceding and all following components.

**Note:** The Flow Graph is only displayed in recent browser versions, e.g. in Firefox 10 or higher and in Internet Explorer 10 or higher.

## 5 Navigation in the Integrator

The Jedox Integrator makes it very easy to navigate step-by-step through an Integrator project. To show how this works, we will refer to the demo project "sampleBiker". Navigate to the connection called "CustomerRegions\_file", using the screenshot below as a guide. Click on the "Layout" button and select "FlowGraph Right" from the drop-down list of "Layout".

The screenshot displays the Jedox Integrator interface. On the left is the 'Navigation' pane showing a tree structure of the project 'sampleBiker', with 'CustomerRegions\_file' selected under 'Connections'. The middle pane shows the 'Integrator' settings for 'CustomerRegions\_file', including 'General settings' (Type: File Connection, Name: CustomerRegions\_file) and 'Main settings' (Location: File System, File name: BikerCustomerRegions.csv, Header: checked, Data delimiter: ;). The right pane shows the 'FlowGraph' for 'CustomerRegions\_file', which is a directed graph starting from a 'Connection: File CustomerRegions\_file' and flowing through an 'Extract: File CustomerRegions' to various 'Transform' and 'Load' jobs, culminating in 'Job: Standard default'.

You can click on each element of the modules "Connections", "Extracts", etc. in the tree on the left side to change your view or you can also select an element in the "FlowGraph" on the right side to go to this step.

## 6 Testing a Component

Each component of a Jedox Integrator project can be tested individually. Please select e.g. a connection in the sample project and press the button "Test".

## 7 Preview Data of an Extract

For each Extract or Transform the first lines of data can be displayed in order to check the correctness of the data already during the Modeling. Select e.g. "Extract – File –CustomerRegions" of sampleBiker and press the button "Preview data":

The screenshot shows the Jedox Integrator interface. The main window is titled 'sampleBiker'. The 'Data preview' button is active. A 'Data preview' dialog box is open, displaying a table of customer data. The dialog has controls for 'Lines to preview' (set to 20) and 'Start line' (set to 0). The table has columns for CustomerID, CompanyName, Country, Region, Phone, and SalesPerson. The data shows 20 records, all from Austria in the East region. A 'Close' button is visible at the bottom right of the dialog.

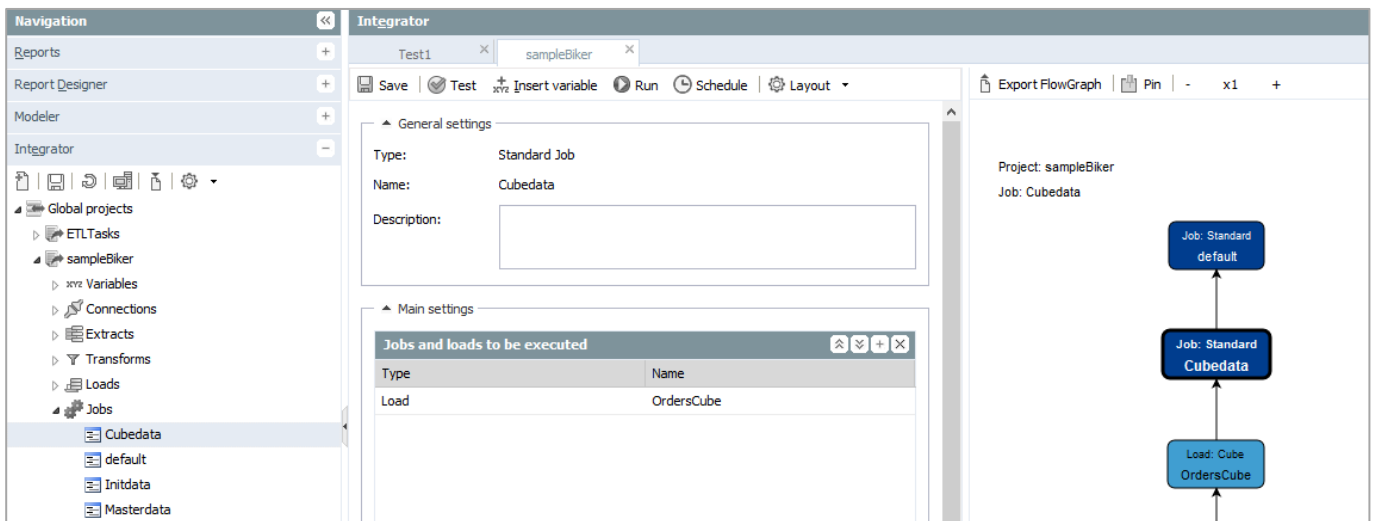
CustomerID	CompanyName	Country	Region	Phone	SalesPerson
132	Another Sporting Go...	Austria	East	661-555-0168	Linda
492	Basic Sports Equipm...	Austria	East	768-555-0125	Linda
20	Central Discount Sto...	Austria	East	582-555-0113	David
298	City Cycling	Austria	East	239-555-0198	José
398	Commendable Bikes	Austria	East	383-555-0155	David
130	Elite Bikes	Austria	East	380-555-0116	Jillian
214	Exclusive Bicycle Mart	Austria	East	584-555-0193	Jae
509	Fun Toys and Bikes	Austria	East	678-555-0175	Shu
701	Future Bikes	Austria	East	674-555-0188	José
59	Locks Company	Austria	East	385-555-0140	Shu
257	Number 1 Supply	Austria	East	384-555-0169	Shu
434	Road-Way Mart	Austria	East	234-555-0112	David
431	Small Cycle Store	Austria	East	583-555-0130	Michael
277	The Bicycle Accessor...	Austria	East	583-555-0198	Shu
165	Third Bike Store	Austria	East	383-555-0117	Jillian
453	Unique Bikes	Austria	East	672-555-0112	Jillian
136	Wholesale Parts	Austria	East	674-555-0187	José

Loaded 20 records.

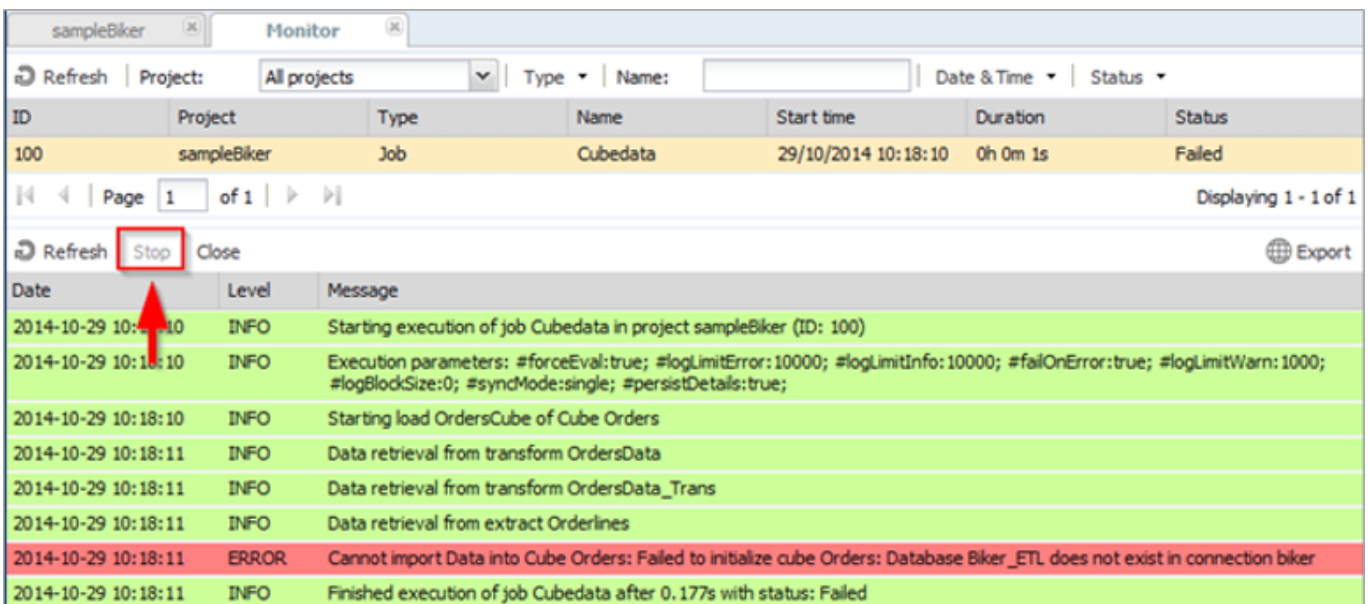


## 8 Executing a Job

The final stage of the execution of a Jedox Integrator process is carried out via a job. To see a demonstration of an Integrator process, please select "Jobs - Standard - Cubedata" of "sampleBiker". The following screen will appear:



Please "Run" this job. The "Monitor" will show you the result:



This job has as result "Error", because it needs before the execution of the jobs "Initdata" and "Masterdata" which create the necessary dimensions.

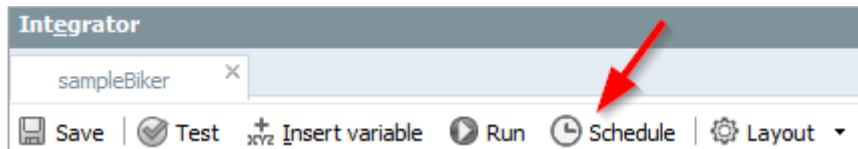
## 9 Stopping the Execution of a Job

To stop the execution of a running job (Status "Running") click on the button "Stop" (in the screenshot above no longer active) in the Integrator Monitor. Jedox Integrator will then try to terminate the execution of this job. After termination, the status is set to "Interrupted".

Note: In some cases, stopping an execution may take a longer time (e.g. if a long-running request has been send to a source or target system). In this case the status "Stopping" is displayed in the monitor. By clicking the stop button a second time, an interrupt signal is sent to the thread of this execution. In most cases the execution will then get interrupted.

## 10 Scheduling a Job

With the Scheduler, tasks can be scheduled directly in Jedox Integrator without the usage of a third-party tool. Please select an existing job in Jedox Integrator, and then click the icon „Schedule“:



Then you get the "Task Wizard":

 A screenshot of the 'Task Wizard' dialog box. The title bar says 'Task Wizard'. On the left side, there is the 'jedox.' logo. The main area is titled 'General' and contains the following fields and options:
 

- Task Name:** A text box containing 'Backup'.
- Description:** An empty text area.
- Start Time:** A date field showing '12/23/2016' and a time field showing '12 : 0'.
- Stop Time:** A date field and a time field showing '0 : 0'.
- Frequency:** Radio buttons for 'Interval' (selected) and 'Cron'.
- Repeat every:** A numeric field showing '1' and a dropdown menu showing 'Days'.
- Task Status:** Two checkboxes: 'Task is immediately active' (checked) and 'Task is private' (unchecked).

 At the bottom of the dialog, there are four buttons: 'Save', '<< Back', 'Next >>', and 'Cancel'.

All made settings can be changed later using the Scheduler.

## 11 Jedox Integrator sample projects

A good way to get familiar with the Jedox Integrator functionality is to try out the sample projects. After the software installation, you will find two sample projects in the Integrator.:

- **Project sampleBiker:**  
It is helpful to get a first impression how to use typically Jedox Integrator for loading data to an OLAP database.
- **Project ETLTasks:**  
This is a rather complex project which includes jobs for some often-recurring general tasks like DatabaseCopy, CubeAnonymize etc.

More details are written in the descriptions of these projects.

Furthermore, there are other instructive samples which you can manually import into Jedox Integrator with the Import button with the button "Import". These provided sample projects can be found in

<Install\_path>\tomcat\webapps\etlserver\data\samples.